A Conceptual Framework For HR Intervention Measuring Business Performance of Small Scale Industries

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Abstract

It is a well established fact that HR interventions are a strategic necessity in business and industry. Human capital has to be trained so that per capita productivity is enhanced. As the battle of competition intensifies two additional facets emerge: firstly capital gets increasingly centralized and concentrated and secondly the manpower employed is expected to be multi-skilled and quality driven. Training programs are accordingly required to support the human resource interventions needed to improve the overall effectiveness of an organization. Training programs are not only to enhance the ability of the human resource and also to create professional relations among individuals and groups within the organization. This paper proposes a framework model for diagnosing, measuring and analyzing the impact of training programs for Small Scale Industries. The authors have also referred many studies before they construct a suitable framework analytical model to examine the impact of the training program.

Introduction

There is a wide-ranging and largely unresolved debate regarding the precise contribution of formal and informal training activities to the overall performance of the organization (Campbell, 1999; Johnson, et al, 2000). Keeping this statement in mind, the present study has made an attempt to measure the impact of training on business performance. As every one knows that there is no specific analysis for measuring business performance, this study has been specifically designed to assess the impact of training on business performance among the participants. The business performance was measured after the participants who acquired sufficient knowledge and skills from the training program. Briefly speaking business performance indicates the level of performance achieved by units run by the trainees. The performance variables for the study are chosen after many reviews made by the researcher.

Review of Literature

The present authors have reviewed some of the studies (both national and international levels) that have greater relevance both directly and indirectly to the issue of this study. All these studies highlight importance of measurement on level of performance on before and after basis. But the authors has considered only after basis for the present research. Some of the referred studies are presented in this section.

A. International Studies: David A. Decenzo and Stephen P Robbins have stated that a learning experience that seeks a relatively permanent change in individuals that will improve their ability to perform on the job. This statement explains that learning experience has correlation with permanent change in individuals. Normon Maier has conducted a study at Detroit Edison Co. to measure the on the job behaviour of trainees before and after basis. For measurement he has chosen both experimental and control group.

Wagner R J and Roland C C have used the third level of Kirkpatrick model in 1992 to measure behavioral changes among the employees. Three approaches were used for measurement of behavioral changes (i)

Questionnaire completion by the participants before and after the training (ii) Supervisory reports completed on the functioning of work groups before and after (iii) Interview with managers. The result of the measurement was that there were no significant changes in the behaviour among the employees.

Kirkpatrick L Donald conducted a research in 1969 to measure the skill levels of foreman and supervisors. A questionnaire method was administered to measure various variables such as reaction, learning, behaviour and results of the trainees. The interview method was also employed for both participants and their supervisors. A research study is conducted at Cost Reduction Institute in order to measure the cost reduction actions done by the employees after they took training. Two techniques were adopted. The first technique was used to conduct depth interviews with some supervisors who tool the training and their immediate supervisors. The second technique was used to administer a mail questionnaire to the remaining enrollers. The results were also confirmed through their boss that the employees made the cost reduction activities after their training. Demissie Tadele Mulatu, Adult training specialist, has suggested that four levels can be applied to measure the performance of any training. The levels are: Reaction, Learning, Transfer and Impact. At reaction level, the usefulness and applicability of course content can be analysed. At learning level, learning activities and methodologies may be analysed. At transfer level, the participants' knowledge towards retaining the information could be tested. At impact level, job performance of the trainees could be tested after the training.

Grenough J and Dixon R suggest that measurement should identify what results the training should provide, what results have occurred, how present results are worthwhile, and how results will be used. Barrett A and P. O' Connell have conducted a research to estimate the returns from in-company training. They have differentiated between general and specific training. In their final results, they have found that the general training has increased productivity but specific has no such effects. They concluded that there might be a problem of matching new skills with old processes. Moon-Hariton conducted a study at the engineering section of GE company. Two years after the adoption of the training was evaluated.

B. National Studies: Besides the path breaking and well known work of Udai Pareek, SD M Pestonjee, T V Rao and a handful others there is precious little that has been done in this field. Sadri and Jayashree posited the 5 D methodology of definition, diagnosis, design, development and delivery within which this subject was subsumed but they did not *per se* posit a method for measuring performance. Bannerji conducted a survey at Indian Engineering Company in 1981 to measure the training in terms of improving managerial qualities of the employees. The results indicated that the employees acquired all the qualities except human relations. The responses indicated that the employees gained little bit knowledge in the human relations area. Sinha (1984) has conducted a research to evaluate the effectiveness of training program. The responses were taken from the respondents both before and after the training program. The qualities were analyzed on a 10-point scale. The qualities have been divided into three forms. They were: Personal, Professional and Human relations. The results of the study suggest that depending on the nature of the training program, the participants could be helped to improve the new qualities and sharpen the existing ones. Venkataraman (1995) has stated in his study that every training program must concentrate more on timings of the program and training needs to improve its overall effectiveness.

Jain RK (1970), based on his study, has suggested that the training program must be conducted in subject matters in depth. The subject matters should be related to the present situation and requirements of the organization. Only then, the training program would be very much effective. Subramanian and Sajjan Rao (1997) studied the effect of the tailor-made training program on 34 workers in the organization. The research was conducted on before and after basis. In the study, the workers were asked to rate their supervisors. The results were analyzed based on the following parameters. The parameters are overall job performance, adaptability, discipline record, morale, interpersonal effectiveness, and self esteem. All ratings were done on a five-point scale. All differences between before and after averages were statistically significant.

Methodology of This Study

The primary aim of this study is to examine the impact of training and also its business performance among the participants. The present authors have employed descriptive research design to examine the association between profile variables of the participants and their business performance. The study is based on census data. The participants who attended the training have been considered for the present analysis. In total, 292 participants were considered for the analysis.

The delayed questionnaire method was administered to collect the data from all the participants. The comprehensive questionnaire has got both direct and indirect types of questions. The questionnaire was prepared on the basis of objective of the study. The questionnaire was constructed by referring to A Handbook of Training and Development, American Society for Training and Development (ASTD). In order to test the appropriateness of the questionnaire, the present authors have conducted a pilot study with 10% sample of the total population. Based on the results, the full-fledged questionnaire was administered. All the questions were translated in the local language for the easy understanding of the participants. The present authors have employed survey method in which mail interview was applied.

Framework for Analysis

According to the present study requirements, the researcher has adopted the fourth level of Kirkpatrick model. The Result part is measured after the participants acquired training and started their industries. The business performance variables for this research are as per the reviews of Dess et al (1984), Qwin (1992), Harsh V Verma (2000) and Denis et al (2001). The performance variables are: 1.product development, 2.staff retention, 3 access to the market, 4.competitiveness, 5.confidence in future, 6.number of business worked with, 7.number of business talked about, 8.sales and 9.profit over period of time. The participants are asked to rate the above said nine variables on a five-point rating scale namely highly positive impact, positive impact, impact, no impact, and negative impact. The scores assigned on these scales are: 5,4,3,2, and 1 respectively. The mean score on various performance variables achieved by the participants belonging to four different industries (Engineering, Textiles, Chemicals, and Food & Agro) are calculated to exhibit the participants view on the business performance caused by the training program. The F statistics was computed to measure the significant difference among the groups of participants regarding the impact on each performance variable.

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| 5 | 4 | 3 | 2 | 1 |

Method of measurement (Five-point rating scale)

Scores: Excellent – 5, Very Good-4, Good-3, Fair-2 and Poor –1.

A Model Framework

Sl.No	Business Performance Variables	Explanation
1.	Product Development	To what extent the participants prepare the product without help of outside experts?
2.	Access to market	To what extent the participants have good rapport with traders and customers?
3.	Competitiveness	Can the participants able to face the competition?
4.	Confidence in future	To what extent the participants have their confidence in building goodwill of the company?
5.	Staff retention	To what extent the participants retain their employees?
6.	Number of business worked with	How many businesses the participants done for clients?
7.	Number of business talked about	How many businesses are in discussion at present?
8.	Sales	To what extent the training has impact on sales?
9.	Profit	To what extent the participants benefited in terms of profitability?

The resulted mean score of the performance variables and the respective F statistics are illustrated in Table-I. The perception on the business performance among the participants may be influenced by the profile of the participants also. Such type of association is also measured in the study. The association between the profile variables of participants and their business performance were analyzed by administering one-way analysis of variance. The one-way analysis is possible because when experimental variables are in interval scale and the numbers of samples are in more than 2 groups. F ratio= Variance between groups / Variance within groups within groups is calculated compared with the respective table value of F. The resulted F statistics and the results are presented in Table II.

Profile of the Participants

The profile variables of the participants were classified into socio-economic and psychological profile of the trainees. It includes sex, age, level of education, occupational background, family income, material possession, nativity, sociability, and units run by the participants.

Table 1. Sex Wise Distribution of the Participants

Sl.No	SEX	Number of Participants
1.	Male	180
2.	Female	112
	Total	292

In total, 61.64 % of the participants in the study are male.

Table 2. Age Wise Distribution of the Participants

Sl.No	Age	Number of Participants
1.	Less than 21 yrs	46
2.	21 to 25 yrs	50
3.	26 to 30 yrs	91
4.	31 to 35 yrs	51
5.	Above 35 yrs	54
Total	292	

The important age groups among the participants are 26 to 30 years and above 35 years since they constitute 31.16 and 18.49 % of the total respectively.

Table 3. Level of Education among the Participants

Sl.No	Level of Education	Number of Participants
1.	Below 10th Standard	21
2.	10th Standard	47
3.	Higher Secondary	72
4.	Diploma/Degree	100
5.	Post Graduate Degree	52
	Total	292

In total, a maximum of 34.25 % of the participants have education up to degree/diploma. It is followed by higher secondary education, which constitutes 24.66 % of the total.

Table 4. Occupational Background of the Participants

Sl.No	Occupational Background	Number of Participants
1.	Unemployed	110
2.	Coolies	24
3.	Private Employment	111
4.	Others	47
	Total	292

In sum 38.01 % of the participants have an occupational background of private employment and it is followed by unemployment.

Table 5. Family Income of the Participants

Sl.No	Family Income	Number of Participants
1.	Less than 3000	30
2.	3001 – 4000	34
3.	4001 – 5000	70
5.	5001 – 6000	85
6.	Above 6001	73
	Total	292

The above table illustrates the distribution of participants on basis of their family income. In total, 29.11% of the total participants have a family income of Rs.5001 – Rs.6000, followed by 25 % have a family income of above Rs.6001.

Table 6. Material Possessions among the Participants

Sl.No	Material Possession in Rs.	Number of Participants
1.	Nil	09
2.	Less than 1 lakh	27
3.	1 – 2 lakhs	54
4.	2 – 3 lakhs	124
5.	Above 3 lakhs	78
	Total	292

In total, maximum of 42.47 % of the participants have a material possession of 2 to 3 lakhs. It is followed by 26.71 % of the participants who have a material possession of above 3 lakhs.

Table 7. Nativity among the Participants

Sl.No	Nativity	Number of Participants
1.	Rural	34
2.	Semi-Rural	58
3.	Semi-Urban	97
4.	Urban	103
	Total	292

The above table illustrates the nativity of the participants. A maximum of 35.27% of the participants are from urban areas followed by 33.22 % from semi-urban areas.

Table 8. Sociability among the Participants

Sl.No	Sociability	Number of Participants
1.	Very High	41
2.	High	79
3.	Moderate	111

4.	Low	36
5.	Very Low	25
	Total	292

In total, 38.01 % of the participants are moderate in their level of social ability, followed by 27.05 % are high in this aspect.

Table 9. Units Run by the Participants

Sl.No	Units	Number of Participants
1.	Engineering (Group 1)	63
2.	Textiles (Group 2)	137
3.	Chemicals (Group 3)	76
4.	Food and Agro (Group 4)	16
	Total	292

The participants are classified on the basis of the units run by them as engineering unit (Group 1), textiles (Group 2), Chemicals (Group 3), and Food and Agro (Group 4). The important units run by the participants are textiles and chemicals.

Data Analysis

The following discussion we hope shall throw some light on the findings

Table 10: Participants view on their Business Performance

Sl.No	Variables	Mean Score				F Statistics
		Group 1	Group 2	Group 3	Group 4	
1	Product Development	3.2931	2.8014	3.1271	2.6013	1.4134
2	Staff Retention	2.8646	2.0291	1.9134	3.0941	2.8317*
3	Access to market	3.0892	2.3366	2.0146	3.1198	2.7364*
4	Competitiveness	3.1174	2.6037	2.2608	2.0342	2.8108*
5	Confidence in future	2.8644	2.0341	1.9078	1.8209	2.6026*
6	Number of business worked with	2.4011	3.8041	3.3142	2.7133	3.3021*
7	Number of business talked about	2.6818	3.2117	2.8062	2.3414	2.0219
8	Sales	3.2092	2.9192	3.8617	2.3647	2.9714*
9	Profit	2.9697	2.0886	1.9373	2.0314	3.0133*

* Significant at Five percent level.

Among the group 1 participants, the highly perceived performance variables are: product development, sales and competitiveness since the respective mean scores are 3.2931, 3.0292 and 3.1174. Among the group 2, number of business worked with and number of business talked about are highly perceived variables since the respective mean scores are 3.8069 and 3.2117. Among the group 3, the highly perceived variables are sales, number of business worked with and product development since the respective mean scores are 3.8617, 3.3142 and 3.1271. The access to market and staff retention are the

highly perceived performance variables among the group 4 participants. In overall, the significant difference among the four groups of participants is identified in all seven performance variables except product development and number of business talked about.

Table 11: Association between the Profile Variables of Participants and their View on Business Performance

Sl.No	Profile variables	F-value	Table value	Result
1	Sex	2.1782	3.84	No Significant Difference
2	Age	2.4069	2.37	Significant Difference
3	Education	2.9198	2.37	Significant Difference
4	Social class	1.0946	2.37	No Significant Difference
5	Occupational Background	2.1141	2.37	No Significant Difference
6	Family Size	1.8081	2.37	No Significant Difference
7	Family Income	2.6913	2.37	Significant Difference
8	Material Possession	2.8082	2.37	Significant Difference
9	Nativity	2.8614	2.60	Significant Difference

The significant association between the perception on the business performance and the profile of participants are identified especially in the case of age, level of education, family income, material possession, and nativity. The F statistics related to the abovesaid profile variables are significant at five percent level. So that, this analysis concludes that the abovesaid profile variables are the criteria on the perception of the business performance.

Policy Implications

Any training program should in our opinion not be a ready-made package. The training should be offered and constructed according to the requirements of the skill sets of the participants for their proposed projects. In order to improve the capabilities of the participants, the trainer could employ certain types of management exercises such as risk taking exercises, leadership games, psychological games, marketing oriented games-role playing and product selling, team building exercise, investment games and goal setting exercises. This would help the participants to increase their level of confidence to run their proposed businesses. The practical exposure may be given to the participants by employing proto type models for each industry. The models could be prepared according to the changed business and technological environment. The separate session may also be added in the training program for the purpose of training the participants to understand how computers and Internet can help them to find out suitable market opportunities and technological developments. At the end of every training program, each participant is asked to present their business proposals to the invited experts. Opinions have to be gathered and sorted out with help of experts.

Conclusion

Every training intervention has to be measured before, during and after basis. These kinds of measurement would definitely help the participants to acquire actual benefits from the training. The present analysis has also pointed out certain areas on which the organizers have to concentrate more to offer full benefits to the future participants. In the present study, the measurement was done to understand how far the audiences of the training are practicing their learned skills in their respective businesses.

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